UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,226	02/04/2008	Roberto Magri	4015-5824 / P/63937/X18	3770

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EXAMINER
LIU, LI

ART UNIT	PAPER NUMBER
2613	

MAIL DATE	DELIVERY MODE
06/16/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED <u>07 June 2011</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

    a) ☒ The period for reply expires <u>3</u> months from the mailing date of the final rejection.

    b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

    Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

    (a)☐ They raise new issues that would require further consideration and/or search (see NOTE below);

    (b)☐ They raise the issue of new matter (see NOTE below);

    (c)☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

    (d)☐ They present additional claims without canceling a corresponding number of finally rejected claims.

        NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

    The status of the claim(s) is (or will be) as follows:

    Claim(s) allowed: _____.

    Claim(s) objected to: <u>13,14 and 22-26</u>.

    Claim(s) rejected: <u>10,15-21 and 27</u>.

    Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet.</u>

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

             /Li Liu/
             Primary Examiner, Art Unit 2613

Continuation of 11. does NOT place the application in condition for allowance because: 1.   Applicant's arguments filed 5/11/2011 have been fully considered but they are not persuasive, and do not place the application in condition for allowance.

1). Applicant's argument - Saleheen discloses lasing of ASE noise in a WDM ring network using variable optical attenuators (VOA), during normal operation. … . The ASE noise is present - and builds naturally to a clipping point - during normal operation, for both dropped channels and channels that are not dropped.

… , Caprino teaches amplifying ASE noise to compensate for the lost channels, p. 3, ll. 15-29. Thus, Caprino teaches amplifying ASE noise only when an upstream break is detected.

Saleheen teaches that an ASE lasing peak is employed during normal operations. During normal operations, Caprino teaches minimizing ASE noise, and amplifying the ASE noise only when there is an upstream fiber break. The references thus teach contradictory uses of ASE lasing, at different times. No one skilled in the art would combine Saleheen with Caprino due to their contradictory teachings regarding the injection and amplification of ASE noise. The references are simply incompatible.

Examiner's response - Caprino does not state that during normal operations, the ASE noise is minimized. The ASE noise is always in the system. Caprino teaches/suggests what a system needs to do when a fiber break occurs and how to handle a change in the channels. Caprino teaches a controller to control the optical amplifier to produce a substantially constant output power or to maintain a substantially constant pump power and to switch the optical amplifiers to a gain control mode after detecting a fiber break to maintain a gain at substantially a level provided by the optical amplifiers prior to the detected loss.

As admitted by Applicant, in Saleheen's system "[t]he ASE noise is present - and builds naturally to a clipping point - during normal operation". Saleheen does not expressly disclose how to handle the "fiber break".

Saleheen mostly deals with the normal operation of the ring network, but Caprino handles a situation as "to a sudden drop of traffic channels, such as when a fiber breaks".

Therefore, the combination of Caprino and Saleheen can obtain a stabilized ring network and "to survive a break in a preceding span", and system reliability can be enhanced, and the transient effect can be controlled. Caprino and Saleheen can compensate with each other so that the WDM ring network can operate properly at both normal condition and "when a fiber breaks". That is, the references are compatible.

2). Applicant's argument - Stentz fails to remedy the incompatability of Saleheen and Caprino. Stentz discloses a method and apparatus for automatically controlling the gain of an optical amplifier. … .

Stentz does not teach or suggest using a loss of a lasing peak to control the gain mode of an amplifier. Stentz only discloses utilizing ASE as part of a feedback system in which the same gain mode is maintained. In Stentz, an ASE channel is used to control amplifier gain by adjusting the pump power to maintain the ASE power at the set point. However, Stentz does not teach or suggest how the loss of the lasing peak is handled. In fact, since Saleheen teaches that a lost lasing peak recovers gradually, one of skill in the art would have no reason to even consider the problem of a lost ASE lasing peak. Accordingly, the further combination with Stentz is also improper.

Examiner's response - The reference Stentz is used to teach detect an absence of an ASE lasing peak. As shown in Figures 2, 4 and 6 etc, a detector circuitry is used to detect the absence of the ASE signal. And a wavelength selective coupler (5 in Figures 4 and 6) is used to select specific peak (or wavelength) of the ASE. That is, the control equipment in Stentz can be used to detect the absence of an ASE lasing peak. By combining Stentz with Saleheen and Caprino, the detector circuitry in the combined system also can be used to detect a loss of a lasing peak.

Regarding the statement "since Saleheen teaches that a lost lasing peak recovers gradually, one of skill in the art would have no reason to even consider the problem of a lost ASE lasing peak". As discussed above, Saleheen mostly deals with the normal operation of the ring network, and the ASE noise is present at a clipping point. Stentz teaches/suggest to detect the absence of the ASE signal so to perform necessary operation; then when a fiber break occurs, the method disclosed by Stentz can be used to detect the loss of the lasing peak.

3). Applicant's argument - None of the cited references, alone or in combination, teaches or suggests the claimed invention. Saleheen and Caprino teach incompatible uses of ASE noise, and cannot be combined. Stentz simply confirms Saleheen's teaching that the loss of a channel may be accompanied by an existing ASE lasing peak. Thus, there is no reason for one skilled in the art to look to Stentz to modify Saleheen. Accordingly, the Office has failed to establish a prima facie case of obviousness, and the § 103 rejection of claim 10 is improper and must be withdrawn.

Examiner's response - As discussed above, Saleheen teaches a WDM optical ring network and a plurality of EDFA arranged in the ring, and Caprino teaches to control the optical amplifier to produce a substantially constant output power or to maintain a substantially constant pump power and to switch the optical amplifiers to a gain control mode after detecting a loss of signal to maintain a gain at substantially a level provided by the optical amplifiers prior to the detected loss, and Stentz teaches to detect a ASE lasing peak. That is, Saleheen and Caprino teach compatible uses of ASE noise, and can be combined, and the combination of Saleheen and Caprino and Stentz teaches/suggests the claimed limitations..